

## IN THE CLAIMS

1. (currently amended) A composition suitable for mucosal delivery comprising:  
an HIV envelope antigen in an amount of about 0.1 µg to about 1000 µg; and  
a detoxified mutant A subunit of *E. coli* heat labile toxin (LT) selected from one  
or more of the group consisting of LTK63 and LTR72; and  
~~an HIV Tat antigen, wherein said HIV envelope antigen is in an amount of about  
0.1 µg to about 1000 µg.~~
2. (original) The composition of claim 1, wherein said heat labile toxin is LTK63.
3. (withdrawn) The composition of claim 1, wherein said heat labile toxin is LTR72.
4. (original) The composition of claim 1, wherein said toxin comprises a holotoxin of  
said *E. coli* heat labile toxin.
5. (previously presented) The composition of claim 1, wherein said envelope antigen is  
selected from the group consisting of gp120, gp160 and Ogp140.
6. (original) The composition of claim 1, wherein said HIV envelope antigen is  
optimized for immunogenicity.
7. (canceled)
8. (currently amended) The composition of claim ~~1~~ 7, wherein said the second HIV Tat  
antigen is optimized for immunogenicity.
- 9-13. (canceled)
14. (original) The composition of claim 1, wherein said composition is suitable for  
intranasal delivery.
15. (original) The composition of claim 1, wherein said composition is suitable for intra-  
vaginal delivery.

16. (original) The composition of claim 1, wherein said composition is suitable for intrarectal delivery.

17-18. (canceled)

19. (withdrawn – currently amended) A method for raising an immune response in a subject comprising mucosally administering to the subject a composition comprising:

an HIV envelope antigen in an amount of about 0.1  $\mu$ g to about 1000  $\mu$ g; ~~and~~

a detoxified mutant A subunit of *E. coli* heat labile toxin (LT) selected from one or more of the group consisting of LTK63 and LTR72; and

an HIV Tat antigen, ~~wherein said HIV envelope antigen is in an amount of about 0.1  $\mu$ g to about 1000  $\mu$ g.~~

20. (withdrawn) The method of claim 19, wherein said heat labile toxin is LTK63.

21. (withdrawn) The method of claim 19, wherein said heat labile toxin is LTR72.

22. (withdrawn) The method of claim 19, wherein said toxin comprises a holotoxin of said *E. coli* heat labile toxin.

23. (withdrawn) The method of claim 19, wherein said envelope antigen is selected from the group consisting of gp120, gp160 and Ogp140.

24-26. (canceled)

27. (withdrawn) The method of claim 17, wherein said composition is administered intranasally.

28. (withdrawn) The method of claim 19, wherein said composition is administered intravaginally.

29. (withdrawn) The method of claim 19, wherein said composition is administered intrarectally.

30-31. (canceled)

32. (previously presented) The composition of claim 1, wherein said HIV envelope antigen is in an amount of about 1  $\mu\text{g}$  to about 300  $\mu\text{g}$ .

33. (canceled)

34. (previously presented) The composition of claim 1, wherein said HIV envelope antigen is in an amount of about 100  $\mu\text{g}$ .

35. (previously presented) The composition of claim 5, wherein said envelope antigen is Ogp140 in an amount of about 300  $\mu\text{g}$ .

36. (currently amended) The composition of claim 5, wherein said Ogp140 comprises an arginine to serine substitution in the primary protease cleavage site (REKR) ~~(SEQ ID NO: 1)~~ (SEQ ID NO:1).

37-40. (canceled)